

REMARKS

Claim 17 has been amended to delete the word "the" appearing at lines 7, 8 and 9 in order to place that claim in better form. No new matter is introduced by these amendments.

Claims 1-16 have been withdrawn from consideration pursuant to Applicants' election in response to the Examiner's restriction requirement under 35 U.S.C. §121.

I. Claims 17-35 stand rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter of the present invention. The specific basis for this rejection was the lack of antecedent basis for "the filler" at lines 7 and 8 of Claim 17.

Applicants believe that the amendments to Claim 17 made herein remove the basis for this rejection.

Withdrawal of this rejection is therefore requested.

II. Claims 17-35 further stand rejected under 35 U.S.C. §103(a) as being unpatentable over Eiben et al (U.S. Patent 5,789,457) in view of Sulzbach et al (U.S. Patent 5,547,276), Davis et al (U.S. Patent 5,527,462) and WO 02/04190 (Sulzbach et al 04190). Applicants respectfully traverse this rejection.

Eiben et al discloses a method and device for producing foams using carbon dioxide dissolved under pressure in which the reaction mixture is passed through at least one fine-meshed net. The fine-meshed net increases the shear and generates bubble nuclei to produce a foam having a homogeneous density.

Eiben et al does **not** teach or suggest a device in which less than all of the combined reaction components is passed through a filter before the reaction mixture is passed through the fine-meshed net disclosed therein. In contrast, Applicants' claimed device requires such a filter.

Eiben et al does **not** teach or suggest a device for producing foams from a reaction mixture which includes a filler.

The significance of this difference is discussed at page 2, lines 15-19 of the specification where it is noted that inclusion of a filler in the foam-forming mixture limits the size of the openings in a mesh net and presents problems with respect to production reliability.

Sulzbach et al discloses a method and apparatus for continuously dispersing fine particle-sized solids in a liquid. In the disclosed method and apparatus, fine particles are continuously dispersed in a liquid.

Sulzbach et al does not teach or suggest an apparatus in which the liquid into which the fine particle-sized solids has been dispersed is passed through a filter as is required in Applicants' claimed apparatus.

Davis et al discloses a self-cleaning filter apparatus.

Davis et al does not teach or suggest anything with respect to an apparatus for the continuous production of polyurethane foams. Therefore, even if one skilled in the art seeking to develop a continuous process for the production of polyurethane foams were to elect to use the Davis et al filter in that process, the teachings of Davis et al would provide no suggestion or guidance with respect to the point at which such filter should be located.

WO 02/04190 discloses a process for the production of foams from flowable reaction components which are loaded with a powder, fine-grained or fibrous loading material with a foaming agent that is transformed from a liquid to a gaseous state as it passes a discharging mechanism. The discharging mechanism is connected downstream of the main mixer. The discharging mechanism is prevented from becoming clogged by an agglomerate reducer which is situated between the loading material feed and the discharging mechanism.

The powder in a liquid reaction component, and not the powder alone, is passed through the agglomerate reducer employed in the apparatus of WO 02/04190.

In contrast, in the present invention, the agglomerate reducer is used to comminute the filler before that filler is combined with any of the liquid reaction components.

Applicants maintain that one of ordinary skill in the art reading the cited references at the time that Applicants made their invention would not be guided by the teachings of those references to Applicants' claimed invention.

More specifically, Eiben et al teaches that the foam-forming mixtures disclosed therein should be passed through the fine-meshed net after they have all been combined and mixed.

One skilled in the art combining the teachings of Sulzbach et al with the teachings of Eiben et al would therefore consider it "obvious" to disperse a filler in a liquid reaction component, combine that filler-containing liquid component with the other reaction components and mix those components before passing that reaction mixture through the fine-meshed net taught by Eiben et al.

Further combination with the self-cleaning filter apparatus of Davis et al would render "obvious" an apparatus in which a filler is dispersed in a liquid reaction component, and that filler-containing liquid component is combined and mixed with the other reaction components before passing that reaction mixture through a self-cleaning fine-meshed net filter of the type taught by Davis et al rather than the simple fine-meshed net taught by Eiben et al.

Further combination with the agglomerate reducer taught in WO 02/04190 would render "obvious" to one skilled in the art an apparatus in which a filler is dispersed in a liquid reaction component, treated with the agglomerate reducer taught in WO 02/04190 before that filler-containing liquid component is combined and mixed with the other reaction components to form the reaction mixture which is passed through a self-cleaning fine-meshed net filter of the type taught by Davis et al rather than the simple fine-meshed net taught by Eiben et al.

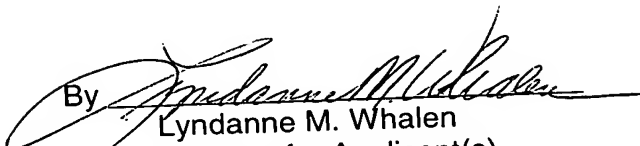
This "obvious" apparatus generated from the combined teachings of the cited references does not, however, correspond to or render obvious Applicants' claimed apparatus in which (1) the filler must be comminuted before being combined with a liquid reaction component and (2) the filler-containing liquid reaction component is passed through a filter before that filler-containing component is combined with the other reaction components.

Applicants' invention as claimed in Claims 17-35 is not therefore rendered obvious by the combined teachings of Eiben et al, Sulzbach et al, Davis et al and WO 02/04190.

Withdrawal of this rejection is therefore requested.

In view of the above amendment and remarks, reconsideration and allowance of Claims 17-35 are respectfully requested.

Respectfully submitted,

By 
Lyndanne M. Whalen
Attorney for Applicant(s)
Reg. No. 29,457

Bayer MaterialScience LLC
100 Bayer Road
Pittsburgh, Pennsylvania 15205-9741
(412) 777-3843
FACSIMILE PHONE NUMBER:
(412) 777-3902

f:\shared\kp\lmw\PO7955.ame